The FV3GFS NWS Virtual Lab Community









Kate Friedman - NCFP/FMC FIB FV3 Training June 14th, 2018

Public home: https://vlab.ncep.noaa.gov/web/fv3gfs





Sign into VLab to access private side of community

Home

Training

-

WELCOME TO THE FV3GFS VLAB COMMUNITY!









FV3GFS Announcements:

Upcoming FV3 Training

GFDL and EMC are pleased to announce an initial FV3 training targeted towards technical developers; the goal of this initial training is to focus on the detailed description of the FV3GFS forecast model (dynamic core, solver and physics) and various utilities, and testing of the FV3GFS for global atmospheric applications. A demo on how to run FV3GFS using the FV3GFS workflow including post processing and verification will also be part of this training.

The training will be held at NCWCP/NCEP in College Park, Maryland June 12th through 14th. More information will be available soon on the following community page: https://vlab.ncep.noaa.gov/web/fv3gfs/training

Version 1 Release of the FV3GFS

NOAA users and external partners with NWS Virtual Lab access can view the release information, as well as other developmental details, in the FV3CFS Community.

FV3GFS VERSION 1 RELEASE

FV3GFS Version 1 Public Release

- Release Date: March 30, 2018
- . Configuration: NEMS + FV3_CAP + FV3_Dycore + IPDv4 + FV3GFS_Beta_Physics
- **Resolution:** C192 (~50km), C384 (~25km), C768 (~13km), no nesting/stretching

HOW TO ACCESS THE FV3GFS

NON-NOAA USERS

Users outside of NOAA will need to obtain a VLab External Partner Account. To get one please have a sponsor from within NCEP (must have noaa.gov email) fill out the external partner account request form within VLab.

NOAA USERS AND EXTERNAL PARTNERS

FV3GFS VLab community:

NOAA users and external partners with VLab access: 1) click "Sign In" on top right of this page, 2) once signed in click on "All Available Communities" in the "My Communities" portlet on the left side, 3) scroll down the list to find the "FV3GFS" community and 4) click "Join" next to the community. Then navigate to the community home page through your "My Communities" list at the top or by this link:

https://vlab.ncep.noaa.gov/group/fv3gfs/

FV3GFS Redmine & Git repositorys:

(access requested through form in FV3GFS VLab community)

https://vlab.ncep.noaa.gov/redmine/projects/fv3gfs https://vlab.ncep.noaa.gov/redmine/projects/comfv3

DOCUMENTS AND MEDIA

Private home: https://vlab.ncep.noaa.gov/group/fv3gfs



Home

Wiki

Forums

Access

Code Releases

Run the FV3GFS

Training

Document Library

Redmine Projects -

UPCOMING FV3 EVENTS

Held at NCWCP/NCEP College Park, MD. See information on the training page:

June 12th-14th, 2018 - FV3 Training Part 1

Q1FY19 UPGRADE DETAILS

Official evaluation

information: http://www.emc.ncep.noaa.gov/users/Alicia.Bentlev/fv3gfs/

CONTACTS

Contacts for the FV3GFS and its sub-modules:

FV3GFS workflow: Fanglin Yang & Kate Friedman

EMC NEMSfv3gfs (nemsfv3gfs): Sam Trahan

EMC FV3 (comfv3): Jun Wang

Community GSI (comgsi): Mike Lueken & Mark Potts

EMC POST (emc-post): Wen Meng & Huiya Chuang

WELCOME TO THE FV3GFS VIRTUAL LAB COMMUNITY HOME!

This is your home for FV3GFS developmental information:

- See the Wiki for general system development information.
- Submit questions and review discussion topics through the Forum. Click here for more information on using the forum.
- Learn about available code in the Code Releases page.
- Request access to the code (comfv3) and workflow (fv3gfs) development projects.
- · Code developers click here for the comfv3 Redmine project page.
- Workflow developers click here fv3gfs Redmine project page.
- Peruse the <u>Document Library</u> for FV3GFS presentations and development related documentation.

Currently there is limited support of initial releases but as the community grows and progress is made our documentation and support will expand.

FV3 DYNAMIC CORE FOR NOAA'S NEXT GENERATION UNIFIED MODELING SYSTEM

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- Resolution: C192 (~50km), C384 (~25km), C768 (~13km), no nesting/stretching
- Build the model: Umbrella build is made available on WCOSS, Theia, Jet, and Gaea; with pre-installed libraries and utilities.
- Data: Fixed fields for running the model and initial conditions (both on disk for selected cases or user generated using CHGRES and NEMS GSM analysis extracted from HPSS)
- · Method of Release: NOAA-EMC GitHub; VLab GIT
- Running the model: CROW front-end and rocoto workflow utilizing simple shell scripts and configuration files for running forecast-only experiments for selected and user-defined cases.
- Post Processing: UPP/NCEP Post producing master and half degree grib2 output.
- · Utilities: Resolution change code and NEMS utilities.

NGGPS and FV3 Dynamic Core:

NOAA GFDL's Finite Volume Cubed Sphere (FV3) dynamical core was selected for the new NGGPS atmospheric model. FV3 dynamical core implementation includes incorporating FV3 into NEMS, and developing advanced physics and data assimilation techniques to match or exceed the skill of operational Global Forecast System (GFS). In addition, NWS is working with federal partners, universities, and the community to create a fully

FV3GFS VLab Community Pages

Public

- Home page: https://vlab.ncep.noaa.gov/web/fv3gfs
- Upcoming FV3 training: https://vlab.ncep.noaa.gov/web/fv3gfs/training

Private:

- Home page: https://vlab.ncep.noaa.gov/group/fv3gfs
- Wiki: https://vlab.ncep.noaa.gov/group/fv3gfs/wiki
- Forums: https://vlab.ncep.noaa.gov/group/fv3gfs/discussions-forums
- Access: https://vlab.ncep.noaa.gov/group/fv3gfs/access
- Code releases: https://vlab.ncep.noaa.gov/group/fv3gfs/code-releases
 - Version 0: https://vlab.ncep.noaa.gov/group/fv3gfs/version-0
 - Version 1: https://vlab.ncep.noaa.gov/group/fv3gfs/version-1
- How-to: https://vlab.ncep.noaa.gov/group/fv3gfs/wiki/-/wiki/Main/How-to
- Training documentation: https://vlab.ncep.noaa.gov/group/fv3gfs/training
- Document library: https://vlab.ncep.noaa.gov/group/fv3gfs/training
- Redmine projects: https://vlab.ncep.noaa.gov/group/fv3gfs/development
 - Drop-down to fv3gfs and it's sub-module projects.

Document Library

Technical, scientific, code release, and training documents, as well as weekly technical meeting presentations available.

